

AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for inactivating hepatitis C virus (HCV) in a patient comprising administering to said patient a siRNA in an effective amount to inactivate said virus, wherein said siRNA is at least [[80%]] 95% identical to ~~any one of~~ SEQ ID NO 1 ~~NOS 1 and 10-28~~.
2. (Previously Presented) The method of claim 1, wherein said siRNA is further modified at the 2' position of at least one ribonucleotide.
3. (Canceled)
4. (Previously Presented) The method of claim 2, wherein said modification is selected from the group consisting of fluoro-, methyl-, methoxyethyl- and propyl-modification.
5. (Original) The method of claim 4, wherein said fluoro-modification is a 2'-fluoro-modification or a 2',2'-fluoro-modification.
6. (Previously Presented) The method of claim 5, wherein at least one pyrimidine of said siRNA is modified, wherein the at least one pyrimidine is cytosine, a derivative of cytosine, uracil, a derivative of uracil or a combination thereof.
7. (Original) The method of claim 1, wherein both strands of said siRNA contain at least one modified nucleotide.
- 8-13. (Canceled)
14. (Currently Amended) A modified siRNA comprising at least one modified ribonucleotide, wherein said siRNA is resistant to RNase and retains the ability to inhibit hepatitis C virus (HCV) replication, and wherein said modified siRNA is at least [[80%]] 95% identical to ~~any one of~~ SEQ ID NO 1 ~~NOS 1 and 10-28~~.

15. (Previously Presented) The modified siRNA of claim 14, wherein said modified siRNA is modified at the 2' position of at least one ribonucleotide.

16. (Canceled)

17. (Previously Presented) The modified siRNA of claim 15, wherein the modification is selected from the group consisting of fluoro-, methyl-, methoxyethyl- and propyl-modification.

18. (Previously Presented) The modified siRNA of claim 17, wherein said fluoro-modification is a 2'-fluoro-modification or a 2',2'-fluoro-modification.

19. (Currently Amended) The modified siRNA of claim 18, wherein at least one pyrimidine of said siRNA is modified, and wherein the at least one pyrimidine is cytosine, a derivative of cytosine, uracil, a derivative of uracil or a combination thereof.

20. (Previously Presented) The modified siRNA of claim 14, wherein both strands of the siRNA contain at least one modified nucleotides.

21-23. (Canceled)

24. (Currently Amended) A method of making a modified siRNA that targets a nucleic acid sequence in hepatitis C virus (HCV) comprising:

(a) preparing a modified-double stranded RNA (dsRNA) fragment containing at least one modified ribonucleotide at least [[80%]] 95% identical to ~~any one of~~ SEQ ID NO 1 ~~NOS 1 and 10-28~~; and

(b) cleaving said modified-dsRNA fragment with Dicer resulting in at least one modified siRNA capable of inactivating said virus.

25. (Previously Presented) The method of claim 24, further comprising:

(c) isolating said at least one modified siRNA.

26-42. (Canceled)

43. (Currently Amended) A double-stranded RNA molecule that inhibits replication of hepatitis C virus (HCV) and is at [[80%]] 95% identical to ~~any one of~~ SEQ ID NO 1 NOS 1 and 10-28.

44. (Canceled)

45. (Previously Presented) A method of inducing targeted RNA interference toward HCV in hepatic cells, comprising administering the double-stranded RNA molecule of claim 43 to hepatic cells.

46. (Previously Presented) A method of inhibiting replication of hepatitis C virus (HCV), comprising administering the double-stranded RNA molecule of claim 43 to cells infected with HCV.

47. (Original) A vector comprising a DNA segment encoding the RNA molecule of claim 43.

48. (Previously Presented) The vector of claim 47, wherein the sense strand of said double-stranded RNA molecule is operably linked to a first promoter and wherein the antisense strand of said double-stranded RNA molecule is operably linked to a second promoter.

49. (Original) The vector of claim 48, wherein said first and second promoters are selected from the group consisting of U6 and H1.

50. (Original) The vector of claim 48 wherein said first and second promoters are the same.

51. (Original) The vector of claim 47, wherein the sense and antisense strands of said RNA molecule are under the control of a single promoter.

52. (Original) The vector of claim 51, wherein said single promoter is selected from the group consisting of U6 and H1.

53. (Original) A host cell comprising the vector of claim 47.

54. (Original) A method of inhibiting replication of hepatitis C virus (HCV) in cells carrying HCV, comprising transfecting said cells with the vector of claim 47.

55. (Previously Presented) A method of treating hepatitis C infection in a subject in need thereof, comprising administering a composition comprising a therapeutically effective amount of the double-stranded RNA molecule of claim 43 to said subject.

56. (Previously Presented) A method of treating hepatitis C infection in a subject in need thereof, comprising administering the vector of claim 47 to said subject.

57-66. (Canceled)

67. (Previously Presented) The method of claim 1, wherein said siRNA is further modified in at least one nucleotide base.

68. (Previously Presented) The method of claim 67, wherein the at least one nucleotide base is a pyrimidine, and said pyrimidine is cytosine, a derivative of cytosine, uracil, a derivative of uracil or a combination thereof.

69. (Previously Presented) The method of claim 1, wherein said siRNA is further modified in at least one phosphate linkage.

70. (Previously Presented) The modified siRNA of claim 14, wherein said modified siRNA is modified in at least one nucleotide base.

71. (Previously Presented) The modified siRNA of claim 70, wherein the at least one nucleotide base is a pyrimidine, and said pyrimidine is cytosine, a derivative of cytosine, uracil, a derivative of uracil or a combination thereof.

72. (Previously Presented) The modified siRNA of claim 14, wherein said modified siRNA is modified in at least one phosphate linkage.

73. (Previously Presented) The method of claim 28, wherein said modified siRNA is modified in at least one nucleotide base.

74. (Previously Presented) The modified siRNA of claim 73, wherein the at least one nucleotide base is a pyrimidine, and said pyrimidine is cytosine, a derivative of cytosine, uracil, a derivative of uracil or a combination thereof.

75-80. (Canceled)

81. (Previously Presented) The modified siRNA of claim 14 comprising a nucleotide sequence at least ~~[[80%]]~~ 95% identical to SEQ ID NO 1 ~~the nucleotide sequence of siRNA5, siRNAC1, siRNAC2, siRNA5B1, siRNA5B2 or siRNA5B4.~~

82-83. (Canceled)

84. (Previously Presented) The method of claim 1, wherein said siRNA is at least 97% identical to any one of SEQ ID NOS 1 and 10-28.

85-86. (Canceled)

87. (Previously Presented) The method of claim 14, wherein said modified siRNA is at least 97% identical to any one of SEQ ID NOS 1 and 10-28.

88. (Canceled)

89. (Previously Presented) The method of claim 43, wherein said siRNA is at least 97% identical to any one of SEQ ID NOS 1 and 10-28.

90. (Previously Presented) The method of claim 43, wherein said siRNA is at least 98% identical to any one of SEQ ID NOS 1 and 10-28.

91. (Previously Presented) The method of claim 43, wherein said siRNA is at least 99% identical to any one of SEQ ID NOS 1 and 10-28.